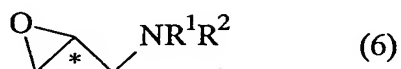


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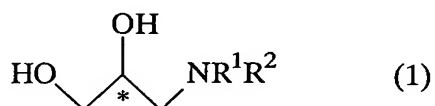
1. A process for preparing an optically active 1-substituted amino-2,3-epoxypropane represented by formula (6):



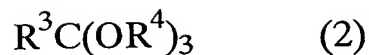
5

(wherein \* represents an asymmetric carbon atom, R¹ and R² independently represent a hydrogen atom or a carbamate-, acyl- or aroyl-type amino protecting group, or R¹ and R² represent together an imide-type amino protecting group),

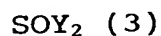
10 the process comprising reacting an optically active 1-substituted amino-2,3-propanediol represented by formula (1):



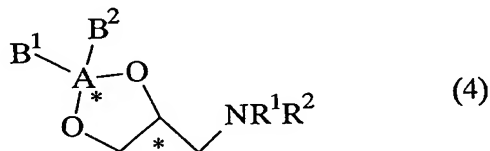
15 (wherein \* represents an asymmetric carbon atom, and R¹ and R² represent the same as the above) with a compound represented by formula (2) or (3):



(wherein  $R^3$  represents a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, an aryl group having 6 to 10 carbon atoms, or a substituted or unsubstituted aralkyl group having 7 to 10 carbon atoms, and  $R^4$  represents an alkyl group having 1 to 6 carbon atoms),

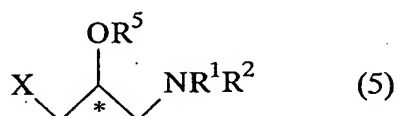


(wherein Y represents a halogen atom or a lower alkoxy group) to produce an optically active compound represented by formula (4):



[wherein \* represents an asymmetric carbon atom or an asymmetric sulfur atom, A represents a carbon atom or a sulfur atom,  $B^1$  represents  $R^3$  (representing the same as the above), and  $B^2$  represents  $OR^4$  (wherein  $R^4$  represents the same as the above) or  $B^1$  and  $B^2$  represent together an oxygen atom, and  $R^1$  and  $R^2$  represent the same as the above]; opening the ring of the compound represented by formula (4) to produce

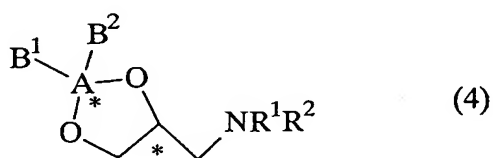
an optically active compound represented by formula (5):



[wherein \* represents an asymmetric carbon atom, X

5 represents a halogen atom,  $\text{R}^5$  represents  $\text{COR}^3$  (wherein  $\text{R}^3$  represents the same as the above) or a hydrogen atom, and  $\text{R}^1$  and  $\text{R}^2$  represent the same as the above]; and further  
subjecting the compound represented by formula (5) to ring  
closure in the presence of a base.

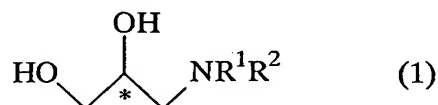
10 2. A process for preparing an optically active compound  
represented by formula (4):



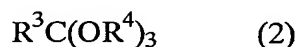
15 [wherein \* represents an asymmetric carbon atom or an  
asymmetric sulfur atom, A represents a carbon atom or a  
sulfur atom,  $\text{B}^1$  represents  $\text{R}^3$  (representing the same as the  
above), and  $\text{B}^2$  represents  $\text{OR}^4$  (wherein  $\text{R}^4$  represents the same

as the above) or B<sup>1</sup> and B<sup>2</sup> represent together an oxygen atom, and R<sup>1</sup> and R<sup>2</sup> represent the same as the above], the process comprising reacting an optically active 1-substituted amino-2,3-propanediaol represented by formula (1):

5

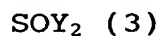


(wherein \* represents an asymmetric carbon atom, R<sup>1</sup> and R<sup>2</sup> independently represent a hydrogen atom or a carbamate-,  
10 acyl- or aroyl-type amino protecting group, or R<sup>1</sup> and R<sup>2</sup> represent together an imide-type amino protecting group) with a compound represented by formula (2) or (3):



15 (wherein R<sup>3</sup> represents a hydrogen atom, an alkyl group having 1 to 6 carbon atoms, an aryl group having 6 to 10 carbon atoms, or a substituted or unsubstituted aralkyl group having 7 to 10 carbon atoms, and R<sup>4</sup> represents an alkyl group having 1 to 6 carbon atoms),

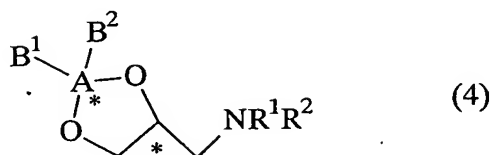
20



(wherein Y represents a halogen atom or a lower alkoxy

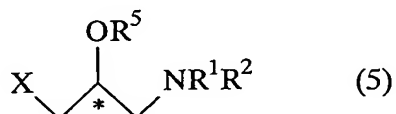
group).

3. An optically active compound represented by formula (4):



5 [wherein \* represents an asymmetric carbon atom or an asymmetric sulfur atom, A represents a carbon atom or a sulfur atom, B<sup>1</sup> represents R<sup>3</sup> (representing the same as the above), and B<sup>2</sup> represents OR<sup>4</sup> (wherein R<sup>4</sup> represents the same as the above) or B<sup>1</sup> and B<sup>2</sup> represent together an oxygen atom, and R<sup>1</sup> and R<sup>2</sup> represent the same as the above].

4. A process for preparing an optically active compound represented by formula (5):

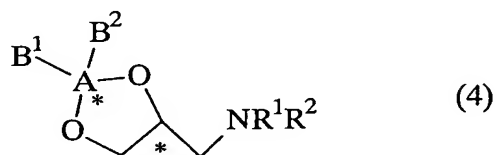


15

[wherein \* represents an asymmetric carbon atom, X represents a halogen atom, R<sup>5</sup> represents COR<sup>3</sup> (wherein R<sup>3</sup> represents the same as the above) or a hydrogen atom, and R<sup>1</sup>

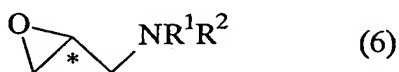
and  $R^2$  represent the same as the above], the process comprising opening the ring of an optically active compound represented by formula (4):

5



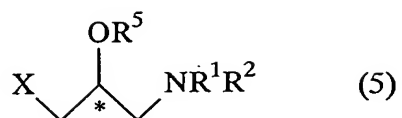
[wherein \* represents an asymmetric carbon atom or an asymmetric sulfur atom, A represents a carbon atom or a sulfur atom,  $B^1$  represents  $R^3$  (representing the same as the above), and  $B^2$  represents  $OR^4$  (wherein  $R^4$  represents the same as the above) or  $B^1$  and  $B^2$  represent together an oxygen atom, and  $R^1$  and  $R^2$  represent the same as the above].

5. A process for preparing an optically active 1-substituted amino-2,3-epoxypropane represented by formula (6):



(wherein \* represents an asymmetric carbon atom, and  $R^1$  and  $R^2$  represent the same as the above], the process comprising preparing an optically active compound represented by

formula (5):



[wherein \* represents an asymmetric carbon atom, X represents a halogen atom, R<sup>5</sup> represents COR<sup>3</sup> (wherein R<sup>3</sup> represents the same as the above) or a hydrogen atom, and R<sup>1</sup> and R<sup>2</sup> represent the same as the above], and then subjecting the compound to ring closure in the presence of a base.